

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: David E. Francischelli et al.

Examiner: Michael F. Peffley

Serial No.: 10/752,135

Group Art Unit: 3739

Filed: January 6, 2004

Docket No.: M190.257.101/P-8922.06

Title: SYSTEM FOR ASSESSING TRANSMURALITY OF ABLATION LESIONS

REPLY BRIEF TO EXAMINER'S ANSWER
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Mail Stop Appeal Brief – Patents

Commissioner for Patents

P.O. Box 1450

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Reply Brief Under 37 C.F.R. §41.41

This Reply Brief is responsive to the Examiner's Answer mailed on September 16, 2009, (with a subsequent correction mailed on October 1, 2009) and supports the Notice of Appeal filed on May 16, 2008 appealing from the final rejection dated February 12, 2008 of claims 1-12 and 16-19 of the above-identified application. All claims remain for consideration.

The U.S. Patent and Trademark Office is hereby authorized to charge required fees or credits due to Deposit Account No. 50-0471 at any time during the pendency of this application.

ARGUMENT

Appellants exercise the option to maintain the Appeal in view of now examined and rejected claim 20 and submits this Reply Brief as set forth in 37 CFR 41.41. All arguments presented in Appellants' Brief are incorporated by reference herein. Further, Appellants respond to the Examiner's Answer as follows.

1. Reply to the Answer Regarding the Rejection of Claim 20

Claim 20 stands rejected as being unpatentable over the Stern U.S. Patent No. 5,443,463 in view of the teachings of Nagai et al. U.S. Patent No. 5,172,949 and Taylor U.S. Patent No. 6,113,592. The Answer sets out on pages 2-3, "claim 20 is substantially similar in scope to Independent claim 1 and that the art used to reject claim 1 reads on the limitations of claim 20 in the same manner." Appellants submit that the rejection of claim 20 is not under new grounds, as asserted in the Answer, but under initial grounds as claim 20 was first time rejected in the Answer. The grounds of the rejection are the same ones addressed in the Answer with respect to claims 1-4, 6-9, 12, 16, and 19. Accordingly, the arguments presented in Appellants' Brief with respect to independent claim 1 are incorporated by reference herein. Claim 20 is further discussed below in the reply to the Answer regarding the rejection of claims 1-4, 6-9, 12, 16, 19, and 20.

2. Reply to the Answer Regarding the Rejection of Claims 21, 22, 25, and 29

Claims 21, 22, 25, and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Stern U.S. Patent No. 5,443,463, in view of the Taylor U.S. Patent No. 6,113,592. Claim 21 is independent, and claims 22, 25, and 29 depend from independent claim 21.

The Answer states on page 8, "Stern shows temperature sensors (31) provided opposite electrodes (21), the sensors being in close proximity to each other." Further, the Answer states, "the Stern temperature sensors are appropriately spaced along the forceps jaw so as to be inherently capable of effectively detecting continuous temperature along the tissue." Appellants maintain that Stern provides no such teaching.

Stern teaches spaced-apart electrodes having correspondingly spaced-apart temperature sensors. There is absolutely no means to “to effectively detect continuous temperature along the second side of the tissue” as set forth in independent claim 21. The one electrode to one temperature sensor correspondence is for “individual control of the energy to each electrode through the switching circuit of FIG. 4 is available in order to achieve controlled coagulation over a large area of tissue” as set forth in Stern column 6, lines 13-16. The spaced apart temperature sensors are not configured to sense continuous temperature, but to discretely sense the temperature of its corresponding electrode in order to control the energy to the electrode. If the temperature sensors of Stern could sense continuous temperature, the switching circuit could not effectively control the corresponding spaced-apart electrode as the feedback circuit would not effectively know to control the one or more electrodes needed to achieve controlled coagulation.

The Answer also states at page 9, “Stern discloses a device that creates a linear lesion.” Appellants also maintain that Stern provides no such teaching. The continuous coagulation of Stern is something different than “a linear ablation lesion” as set forth in the claim. The continuous coagulation is achieved by spaced-apart electrodes using the “slow cook” method described at Stern column 6, lines 24-29. One skilled in the art knows that linear ablation is not formed with discrete and spaced-apart electrodes. Linear ablation as claimed is ablation along a line and defined as such on page 2, line 11, of the application.

Taylor is not cited for teaching these features, and does not teach these features. Because these features are missing from each of the references separately, they must be missing from any proposed combination of Stern and Taylor. Appellants maintain that claim 21 is patentably distinguishable from the prior art. Claims 22, 25, and 29 depend from claim 21 and serve to further define the independent claim. By virtue of their dependency on an claim 21, claims 22, 25, and 29 are patentably distinguishable from the combination of Stern and Taylor.

3. Reply to the Answer Regarding the Rejection of Claims 1-4, 6-9, 12, 16, 19, and 20

Claims 1-4, 6-9, 12, 16 and 19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Stern in view of the Nagai et al. U.S. Patent No. 5,172,949 and Taylor. Claims 1 and 20 are independent claims, and claims 2-4, 6-9, 12, 16, and 19 depend from claim 1.

As discussed above with respect to the rejection of claim 21, Stern does not teach a means "to effectively detect continuous temperature along the second side of the tissue" as set forth in independent claims 1 and 20. This limitation is not taught or made obvious in the secondary references of Taylor or Nagai. Accordingly this feature would be missing from any combination of the references. For the reasons discussed in the Appeal Brief and above with respect to this limitation in claim 21, Appellants respectfully submit that claim 1 and 20, and claims 2-4, 6-9, 12, 16, and 19, which depend from claim 1, are patentably distinguishable from the combination of references.

4. Reply to the Answer Regarding the Rejection of Claims 5, 17, and 18

Claims 5, 17, and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Stern, Taylor and Nagai as applied to claims 1 and 4 above and further in view of the Chinn U.S. Patent No. 5,647,868. Claims 5, 17 and 18 depend from independent claim 1. Chinn does not provide the features missing from Stern pointed out above. Accordingly, the combination of Stern, Taylor, Nagai, and Chinn does not provide the features of claim 1, namely "to effectively detect continuous temperature along the second side of the tissue." By virtue of their dependency to claim 1, claims 5, 17, and 18 are also patentably distinguishable from the prior art combination.

5. Reply to the Answer Regarding the Rejection of Claims 10 and 11

Claims 10 and 11 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Stern, Taylor and Nagai as applied to claim 1 above and further in view of the Hoffman U.S. Patent No. 4,682,605. Claims 10 and 11 depend from independent claim 1. Hoffman does not

provide the features missing from Stern pointed out above. Accordingly, the combination of Stern, Taylor, Nagai, and Hoffman does not provide the features of claim 1, namely “to effectively detect continuous temperature along the second side of the tissue.” By virtue of their dependency to claim 1, claims 10 and 11 are also patentably distinguishable from the prior art combination.

6. Reply to the Answer Regarding the Rejection of Claims 23, 24, and 26-28

Claims 23, 24 and 26-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Stern and Taylor in view of the Chinn. Claims 23, 24, and 26-28 depend from claim 21, which has been shown to be patentably distinguishable from the combination of Stern and Taylor. As described above, Chinn does not teach the features missing from Stern relevant to the independent claim. Because the combination of Stern, Taylor, and Chinn do not teach the features of claim 21, Appellants submit that dependent claims 23, 24, and 26-28 are patentably distinguishable from the prior art combination.

Appellant's Reply Brief to Examiner's Answer to the Board of Patent Appeals and Interferences

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CONCLUSION

For the foregoing reasons, Applicant believes all the pending claims are in a condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to contact either Jeffrey J. Hohenshell at Telephone No. (763) 505-8426 or Rudolph P. Hofmann at Telephone No. (612) 573-2010.

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Respectfully submitted,

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